

Size: 3,935 acres
Mission: Manufacture, store, and test small-arms munitions
HRS Score: 33.62; placed on NPL in July 1987
IAG Status: IAG signed in September 1989
Contaminants: Explosives, heavy metals, solvents, and petroleum/oil/lubricants
Media Affected: Groundwater and soil
Funding to Date: \$48.3 million
Estimated Cost to Completion (Completion Year): \$109.7 million (FY2028)
Final Remedy in Place or Response Complete Date for All Sites: FY2007



Independence, Missouri

Restoration Background

Operations at the Lake City Army Ammunition Plant, a government-owned, contractor-operated facility, include the manufacture, storage, and testing of small-arms munitions. Principal site types at the installation include abandoned disposal pits, sumps, firing ranges, old lagoons, old dumps, and closed RCRA lagoons and burning grounds. Environmental studies initially identified 73 sites, which were consolidated into 35 sites for further investigation.

Sampling at seven representative areas identified groundwater contaminated with volatile organic compounds (VOCs), explosives, and heavy metals. After the plant was placed on the National Priorities List (NPL), it conducted a Remedial Investigation and Feasibility Study (RI/FS) focusing on four operable units (OUs), the Northeast Corner OU, the Area 18 OU, Area 8 OU, and an installationwide OU. Area 8 was subsequently incorporated into the installationwide OU.

In FY93, the installation drafted RI/FS reports for the Area 18 OU and the Northeast Corner OU. In FY94, the installation completed the draft RI report for the Area 8 and installationwide OUs and finished Relative Risk Site Evaluations. The installation completed an Engineering Evaluation and Cost Analysis (EE/CA), an Action Memorandum, and design documents in FY95.

In FY96, the installation began revising its community relations plan. It also initiated a Removal Action at the Area 18 OU, with concurrent development of the final Record of Decision (ROD). The Army completed the FS report for the Area 18 OU and submitted the Proposed Plan to the regulatory agencies. The installation and EPA began an informal dispute resolution process concerning the Area 18 Proposed Plan. Also, in FY96, the installation initiated Removal Actions for sumps, installationwide groundwater containment, and the capping and leachate collection system for the abandoned landfill in

Area 16. The installation submitted a draft final FS for the Northeast Corner OU.

In FY97, the installation completed a pump-and-treat system for Area 18. It developed an EE/CA and an Action Memorandum for the leachate collection trench and a cap for the abandoned landfill in the Area 16/Northeast Corner OU. The Northeast Corner OU oil and solvent pits, which created the VOC groundwater plume leading to the installation boundary, became a higher priority than the abandoned landfill. The Army proceeded with an interim ROD to install a permeable reactive barrier in the Northeast Corner OU. The Army also abandoned the removal action for the landfill and will incorporate the landfill's cleanup into the final Northeast Corner OU ROD.

The commander formed a Restoration Advisory Board (RAB). Through the RAB and monthly program managers meetings, the installation has improved relations with the public and regulatory agencies.

FY98 Restoration Progress

The installation completed the final ROD for the Northeast Corner OU Interim Action. It also installed an EW-2 extraction well at the northern boundary to prevent off-post migration of a contaminated groundwater plume. Revisions of the draft sump characterization work plan began. Installationwide characterization of groundwater was completed using the U.S. Army Corps of Engineers Site Characterization and Analysis Penetrometer System rig. Cleanup of depleted uranium on the firing range began under a NRC decommissioning plan.

The RAB held six meetings in FY98. The installation held meetings with EPA and the Missouri Department of Natural Resources to prepare an installation action plan.

Plan of Action

- Complete ROD for Area 18 in FY99
- Complete Remedial Design and Remedial Action (RD/RA) for Area 18 by FY00
- Complete RD/RA for Interim Action in the Northeast Corner OU by FY00
- Complete final FS, Proposed Plan, and ROD for the entire Northeast Corner OU by FY00
- Complete the final risk-based screening criteria document and installationwide FS by FY00
- Complete sumps characterization and removal by FY00

FY99 FUNDING BY PHASE AND RELATIVE RISK

